



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ORGANIZED 1878

INCORPORATED 1891

JANUARY
1919

VOLUME XXXVIII

NO. 1

TRANSACTIONS
OF THE
AMERICAN
MICROSCOPICAL
SOCIETY

PUBLISHED QUARTERLY BY THE
AMERICAN MICROSCOPICAL SOCIETY
MENASHA, WISCONSIN

ANNUAL SUBSCRIPTION \$3.00

SINGLE COPY \$1.00

DOUBLE NUMBERS \$2.00

Attention of members of the
AMERICAN MICROSCOPICAL SOCIETY

is called to the announcement of Grants
from the Spencer-Tolles Research Fund.

(See *TRANSACTIONS*, July, 1913)

These awards are to stimulate and aid research in
Microscopic work

1. The Grantee must be a member of the Society.
2. Resulting discoveries must first be offered for publication in the Society Transactions.
3. Application should be made to Dr. Henry B. Ward, Chm., Urbana, Ill.

NOTICE TO MEMBERS

It is a source of regret to the Editor that the *Transactions* cannot be issued as dated. The issue is dependent, however, upon the income of material from the members, and must await upon a certain degree of balance in the material as well as quantity of material.

The Secretary will consider it a favor if members will notify him of non-receipt of numbers of the Transactions, and of changes of address.

Correspondence relative to membership, publication, exchanges, advertising, etc., should be addressed to the Secretary-Editor.

T. W. GALLOWAY,
Secretary-Editor.

Beloit, Wisconsin.

TRANSACTIONS
OF THE
**American Microscopical
Society**

VOLUME XXXVIII

1919

TRANSACTIONS
OF THE
American
Microscopical Society

ORGANIZED 1878

INCORPORATED 1891

PUBLISHED QUARTERLY

BY THE SOCIETY

EDITED BY THE SECRETARY

T. W. GALLOWAY

BELOIT, WISCONSIN

VOLUME XXXVIII

NUMBER ONE

Entered as Second-class Matter August 13, 1918, at the Post-office at Menasha,
Wisconsin, under act of March 3, 1879. Acceptance for mailing at the
special rate of postage provided for in Section 1103, of the
Act of October 3, 1917, authorized Oct. 21, 1918

The Collegiate Press
GEORGE BANTA PUBLISHING COMPANY
MENASHA, WISCONSIN
1919

TABLE OF CONTENTS

FOR VOLUME XXXVIII, Number 1, 1919

Illustrating Biological Manuscripts, with Plates I to V, by E. A. Smith.....	1
The Occurrence of <i>Trypanoplasma</i> as an Ectoparasite, with Plate VI, by Olive Swezy	20
Notes and Reviews: The new Treasurer; Problems of the Future; Crystals in Amebas; Montana Trematodes; The crystalline Style of Lamellibranchs; Revivification of Earthworms; Life Behavior of Ascaris, Reversal of Orientation to light; Reactions of land Isopods to Light; Adaptive Coloration of <i>Chromodoris zebra</i> ; Camouflage in Reef Fishes; Glycogen in the nervous System; Effect of Strain on Development of Bone; Epithelial Movements in vitro; Entomological Abstracts; A convenient Slide Holder; Notes on Technique; Measuring Carbon Dioxide Produced by Protozoa; Method for Demonstrating Glycogen in Tissues.....	26

OFFICERS

President: L. E. GRIFFIN.....Pittsburg, Pa.
First Vice President: H. M. WHELPLEY.....St. Louis, Mo.
Second Vice President: C. O. ESTERLY.....Los Angeles, Cal.
Secretary: T. W. GALLOWAY.....Beloit, Wis.
Treasurer: WILLIAM F. HENDERSON.....Decatur, Ill.
Custodian: MAGNUS PFLAUMMeadville, Pa.

ELECTIVE MEMBERS OF THE EXECUTIVE COMMITTEE

M. M. ELLIS.....Boulder, Colo.
 J. E. ACKERTManhattan, Kas.

EX-OFFICIO MEMBERS OF THE EXECUTIVE COMMITTEE

Past Presidents Still Retaining Membership in the Society

SIMON HENRY GAGE, B.S., of Ithaca, N.Y.,	at Ithaca, N. Y., 1895 and 1906
A. CLIFFORD MERCER, M.D., F.R.M.S., of Syracuse, N. Y.,	at Pittsburg, Pa., 1896
A. M. BLEILE, M.D., of Columbus, Ohio,	at New York City, 1900
C. H. EIGENMANN, Ph.D., of Bloomington, Ind.,	at Denver, Colo., 1901
E. A. BIRGE, LL.D., of Madison, Wis.,	at Winona Lake, Ind., 1903
HENRY B. WARD, A.M., Ph.D., of Urbana, Ill.,	at Sandusky, Ohio, 1905
HERBERT OSBORN, M.S., of Columbus, Ohio,	at Minneapolis, Minn., 1910
A. E. HERTZLER, M.D., of Kansas City, Mo.,	at Washington, D. C., 1911
F. D. HEALD, Ph.D., of Pullman, Wash.	at Cleveland, Ohio, 1912
CHARLES BROOKOVER, Ph.D., of Louisville, Ky.,	at Philadelphia, Pa., 1914
CHARLES A. KOFOID, Ph.D., of Berkeley, Calif.,	at Columbus, Ohio, 1915
M. F. GUYER, Ph.D., of Madison, Wis.,	at Pittsburg, Pa., 1917

The Society does not hold itself responsible for the opinions expressed
by members in its published *Transactions* unless endorsed by special vote.